Listing of the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

29. (currently amended) A device for singulating articles from a bulk supply of such articles, comprising:

a housing ~~of~~ for holding articles to be singulated;

an exit channel fluidly connected to the housing and configured in cross-section to permit the passage of a single article at a time, the exit channel including a forwardly-directed jet aperture and a rearwardly-directed jet aperture;

a first positive pressure source fluidly connected to the forwardly-directed jet aperture;

a second positive pressure source fluidly connected to the rearwardly-directed jet aperture; and

a ~~controlled~~ controller operatively connected with the first and second positive pressure sources that selectively controls the application of positive pressure to the forwardly-directed jet aperture and the rearwardly-directed jet aperture.

30. (previously presented) The device defined in Claim 29, further comprising a sensor operatively associated with the controller that detects articles passing through the exit channel.

31. (currently amended) The device defined in Claim 29, further comprising a second forwardly-directed jet aperture located downstream of the rearwardly-directed jet aperture, the second forwardly-directed aperture being fluidly connected with a third positive pressure source and with the controller.

32. (previously presented) The device defined in Claim 31, wherein the first, second and third positive pressure sources are coincident.

33. (previously presented) The device defined in Claim 29, wherein the first and second positive pressure sources are coincident.

34. (currently amended) The device defined in Claim 29, wherein the housing includes a jet aperture directed toward the exit channel, the jet aperture being fluidly connected to a fourth positive pressure source, the fourth positive pressure source being operatively connected to the controller.

35. (previously presented) The device defined in Claim 29, wherein the housing includes a floor and an opposing ceiling, and wherein the floor includes a first foraminous member and the ceiling includes a second foraminous member.

36. (previously presented) The device defined in Claim 29, further comprising an article-orienting member positioned upstream of the exit channel.

37. (previously presented) The device defined in Claim 29, wherein said first positive pressure source and said forwardly-directed jet aperture are configured to direct a jet of between about 1 and 500 psi into the exit channel.

38. (previously presented) The device defined in Claim 29, wherein said second positive pressure source and said rearwardly-directed jet aperture are configured to direct a jet of between about 1 and 500 psi into the exit channel.

39. (currently amended) The device defined in Claim 34, wherein the housing jet aperture and the fourth positive pressure source are configured to ~~directed~~ direct a jet of between about 1 and 500 psi toward the exit channel.

40. (previously presented) The device defined in Claim 29, further comprising a plurality of substantially identical articles to be singulated, the articles being stored in the housing.

41. (currently amended) An article-orienting singulating device, comprising;

a housing having a foraminous floor;

an exit channel attached to and fluidly connected with the housing;

an article-orienting unit positioned adjacent an upstream portion of the exit channel;

wherein the article-orienting unit and the exit channel upstream portion define an entry space that permits an article to enter only in a longitudinal orientation in which the longest dimension thereof is generally parallel to a downstream flow path; and

wherein the article-orienting unit and the exit channel upstream portion are spaced such ~~than~~ that an article that enters the entry space in a transverse orientation in which its longest dimension is generally perpendicular to the downstream flow path and that strikes the article-orienting units is caused to re-orient itself to a longitudinal orientation and pass into the exit channel; and

wherein the article-orienting unit is configured to be adjustable in cross-section to accommodate articles of different sizes.

42. (previously presented) The article-orienting singulating device defined in Claim 41, further comprising a plurality of substantially identical articles to be singulated, the articles being stored in the housing.

43. (currently amended) The article-orienting singulating device defined in Claim 42, wherein the articles are generally oblong and have a longitudinal dimension, a first ~~traverse~~ transverse dimension and a second ~~traverse~~ transverse dimension that is less than the longitudinal dimension and greater than the first transverse dimension, and wherein the entry space is defined by a first distance and a second distance larger than ~~an~~ and perpendicular to the first distance,

and wherein the first distance is greater than the first ~~traverse~~ transverse dimension and less than the smaller of the second transverse dimension and two times the first transverse dimension, and the second distance is greater than the second transverse dimension and less than the smaller of the longitudinal dimension and two times the second transverse dimension, such that articles may pass into the exit channel through the article-orienting unit one at a time in a longitudinal orientation in which the first transverse dimension is generally parallel with the first distance, and the second transverse dimension is generally parallel with the second distance.

44. (previously presented) The article-orienting singulating device defined in Claim 42, wherein the articles are generally oblong and have a longitudinal dimension, a first transverse dimension and a second transverse dimension that is less than the longitudinal dimension and greater than the first transverse dimension, and wherein the entry space is defined by a first distance and a second distance larger than and perpendicular to the first distance, and wherein the first distance is greater than the second transverse dimension and less than the smaller of the longitudinal dimension and two times the first transverse dimension, and the second distance is greater than the second transverse dimension and less than the smaller of the longitudinal dimension and two times the first transverse dimension, such that articles may pass through the article-orienting device into the exit channel one at a time in multiple longitudinal orientations.

45. (currently amended) The article-orienting singulating device defined in Claim ~~42~~ 41, wherein the exit channel is sized and ~~configures~~ configured such that only one article can pass through any cross-section thereof at a time.

46. (previously presented) The article-orienting singulating device defined in Claim 42, further comprising a pressure source fluidly connected with the housing, the pressure source being configured to draw air through the foraminous floor into the housing, thereby agitating the articles contained therein.